

What is claimed is:

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5 1. A method for producing a display apparatus constructed by arranging a plurality of display units (14) arranged with a plurality of display components (26), said method comprising the steps of:

displaying a uniform image on said display apparatus (10) to detect luminances of said respective display components (26);

10 calculating luminance target values of said respective display components (26); and

calculating luminance correction coefficients for said respective display components (26) on the basis of said luminance target values of said respective display components (26).
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20 2. The method for producing said display apparatus according to claim 1, wherein said luminance target value is calculated by averaging said luminances of said display component (26) and said plurality of display components (26) arranged therearound, and regarding an obtained average value as said luminance target value of said display component (26).

25 3. The method for producing said display apparatus according to claim 2, wherein said plurality of display components (26), which are arranged around said display

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component (26), are included in a group of said display components (26) corresponding to $(2m + 1)$ rows aligned in a vertical direction, and they are included in a group of said display components (26) corresponding to $(2n + 1)$ columns aligned in a horizontal direction.

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15 4. The method for producing said display apparatus according to claim 3, wherein when M individuals of said display components (26) are arranged in vertical direction, N individuals of said display components (26) are arranged in horizontal direction, and $(M \times N)$ individuals of said display components (26) are provided in total for one of said display units (14), then m and n satisfy the following expressions provided that α and β are variables of not less than 1 respectively:

$$(1/2)M \leq 2m + 1 \leq \alpha M$$

$$(1/2)N \leq 2n + 1 \leq \beta N.$$

20 5. The method for producing said display apparatus according to claim 4, wherein α and β are set so that said display components (26), in each of which said luminance correction coefficient exceeds an upper limit value, have a number which is not more than a predetermined number.

25 6. The method for producing said display apparatus according to claim 1, further comprising:

a first step of retrieving said display component (26)

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5 which exhibits a minimum value of said calculated luminance target values; and

a second step of increasing said current luminance target value by a certain value for said retrieved display component (26).

7. The method for producing said display apparatus according to claim 1, further comprising the steps of:

retrieving said display component (26) which exceeds a threshold value of said calculated luminance target values; and

decreasing said current luminance target value to said threshold value for said retrieved display component (26).

8. The method for producing said display apparatus according to claim 1, wherein said luminance correction coefficient is calculated in consideration of color temperature.

9. The method for producing said display apparatus according to claim 8, further comprising the steps of:

performing standardization for said calculated luminance target values for said respective display components (26) in accordance with a color scheme respectively;

making amendment so that values obtained after said standardization are included in a certain range; and

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performing a restoring process for values obtained after said amendment in accordance with said color scheme respectively to obtain luminance target values in consideration of said color temperature.

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10. The method for producing said display apparatus according to claim 9, wherein said step to obtain said luminance target values in consideration of said color temperature includes a process for multiplying a color temperature regulation constant.

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11. The method for producing said display apparatus according to claim 1, wherein said display unit (14) is a display unit (14) comprising an optical waveguide plate (20) for introducing light (18) from a light source (16) thereinto, and a driving section (24) provided opposingly to a first plate surface of said optical waveguide plate (20) and arranged with said display components (26) of a number corresponding to a large number of picture elements, wherein a screen image corresponding to an image signal is displayed on said optical waveguide plate (20) by controlling a displacement action of an actuator element (22) of said display component (26) in a direction to make contact or separation with respect to said optical waveguide plate (20) in accordance with an attribute of said image signal to be inputted so that leakage light is controlled at a predetermined portion of said optical waveguide plate (20).

5 12. A method for producing a display apparatus constructed by arranging a plurality of display units (14) arranged with a plurality of display components (26), said method comprising the steps of:

obtaining characteristic values for said respective display units (14) respectively;

ranking said display units (14) on the basis of said obtained characteristic values;

10 partitioning an arrangement area (Z10) for said plurality of display units (14) of said display apparatus (10) to designate ranks of said display units (14) to be arranged in respective areas (Z12); and

15 arranging said display units (14) in accordance with said designation to manufacture said display apparatus (10).

20 13. The method for producing said display apparatus according to claim 12, wherein when said ranked display units (14) are arranged in said designated areas (Z11, Z12), said display units (14), which are ordered in an identical rank, are arranged in accordance with a predetermined rule.

25 14. The method for producing said display apparatus according to claim 12, wherein:

said arrangement area (Z10) for said display units (14) is partitioned into a central portion (Z11) and a peripheral portion (Z12); and

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said display units (14) having high ranks are arranged in said central portion (Z11), and said display units (14) having low ranks are arranged in said peripheral portion (Z12).

15. The method for producing said display apparatus according to claim 12, wherein:

when said characteristic value includes an average luminance of said plurality of display components (26) for constructing said display unit (14) and a number of deficiencies of said display components (26);

said ranking is determined by overall evaluation on the basis of a rank based on said average luminance and a rank based on said number of deficiencies.

16. The method for producing said display apparatus according to claim 15, wherein:

said arrangement area (Z10) for said display units (14) is partitioned into a central portion (Z11) and a peripheral portion (Z12); and

said display units (14) having high ranks based on said number of deficiencies are arranged in said central portion (Z11), and said display unit (14) having low ranks based on said number of deficiencies are arranged in said peripheral portion (Z12).

17. The method for producing said display apparatus

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according to claim 16, wherein said display units (14)
having substantially identical ranks based on said average
luminance are arranged in said central portion (Z11) and
said peripheral portion (Z12).

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